

REMARKS/ARGUMENTS

The title of the invention was deemed being not descriptive. In the specification the title has been amended.

Claims 1 to 18, and 23 were rejected under 35 U.S.C. § 112, second paragraph for being indefinite. Claim 1 was rejected under 35 U.S.C. § 102 (b) as being anticipated by Kuhn et al. (US 6,250,204). Claims 1, 3, 4, 7, 9, 14, 15, 18 to 21, 23, 24, and 26 to 30 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Atsugi et al. (US 3,557,664). Claims 2, 5, 6, 9 to 13, 16, 17, 22, and 25 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Atsugi, as applied to claims 1, 4, 19, and 21, and further in view of Black (US 4,065,229). Claim 8 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Atsugi, as applied to claim 1, and further in view of Ban et al. (US 6,247,322).

Claims 1 and 23 have been amended. Claim 31 has been added.

Reconsideration of the application is respectfully requested.

35 U.S.C. 112 Rejections

Claims 1 to 18, and 23 were rejected under 35 U.S.C. § 112, second paragraph for being indefinite.

Claim 1 has been amended to recite a pot-shaped housing more clearly and claim 23 now recites a seal for clarity and proper antecedent basis.

Withdrawal of the rejections is respectfully requested.

35 U.S.C. 102 Rejections

Claim 1 was rejected under 35 U.S.C. § 102 (b) as being anticipated by Kuhn et al. (US 6,250,204). Claims 1, 3, 4, 7, 9, 14, 15, 18 to 21, 23, 24, and 26 to 30 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Atsugi et al. (US 3,557,664).

With respect to claim 1, claim 1 now recites that “all of the intake and discharge chambers for the coolant being located on a same side of the cylinder block and within a space defined by the housing and housing sealing cover” as shown clearly for example in Fig.1 with chambers 14 and 19.

The housing sealing cover thus is defined to enclose the cylinder head intake and discharge chambers, which are located on one side of the cylinder block.

The valve plate 37 and housing section 5 of Kuhn do not enclose all of the intake and discharge chambers for the cylinder head 7 of Kuhn as now recited in claim 1.

Akaike is a dual cylinder head system with suction and discharge chambers on both sides of the piston section, and thus does not have all of the intake and discharge chambers on one side of the cylinder block as now recited in claim 1. This configuration of the present invention advantageously can permit for the hotter discharge chambers to be isolated from the housing or housing sealing cover. See present specification at [0003] and [0014] for example.

With respect to independent claim 19, this claim recites a compressor with intake and discharge chambers for a suction pressure zone and a discharge pressure zone, the compressor comprising:

a pot-shaped housing and a housing sealing cover so that a housing area is defined by two pieces, the pot-shaped housing having a closed side with a housing bottom;

a drive shaft including bearings;

a drive mechanism for reciprocating pistons and converting the rotational movement of the drive shaft into a reciprocating movement of the pistons;

a cylinder block for aspirating and compressing a coolant through the reciprocating movement of the pistons; and

a valve device;

the intake and discharge chambers, the valve device, and the cylinder block being situated in the closed side of the pot-shaped housing.

Akaike does not have “a pot-shaped housing and a housing sealing cover so that a housing area is defined by two pieces, the pot-shaped housing having a closed side with a housing bottom” as claimed in claim 19. The casing 11 and cylinder head 19 cited as the pot shaped housing with respect to claim 1 does not form a closed side since the drive shaft 15 penetrates the cylinder head 19. See Fig. 6 of the present application.

Withdrawal of the rejections to claims 1 and 19 and their dependent claims under 35 U.S.C. 102(b) is respectfully requested.

35 U.S.C. 103 Rejections

Claims 2, 5, 6, 9 to 13, 16, 17, 22, and 25 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Atsugi, as applied to claims 1, 4, 19, and 21, and further in view of Black (US 4,065,229). Claim 8 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Atsugi, as applied to claim 1, and further in view of Ban et al. (US 6,247,322).

In view of the comments with respect to claims 1 and 19 above, withdrawal of these rejections is respectfully requested as well.

New Claim 31

New claim 31 recites the limitations of original claim 1 and that a seal seals the pot-shaped housing and the housing sealing cover at a sealing location, the sealing location being exposed to the intake chamber but not to the discharge chamber, as shown for example in Fig. 1 and discussed at [0028] with respect to seal 8 and intake chamber 14. The seal thus is not exposed to the hotter discharge chamber.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,
DAVIDSON, DAVIDSON & KAPPEL, LLC

By: _____

Cary S. Kappel, Reg. No. 36,561
[signing for William C. Gehris, Reg. No. 38,156]

Davidson, Davidson & Kappel, LLC
485 Seventh Avenue
New York, New York 10018
(212) 736-1940